DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-022173 Address: 333 Burma Road **Date Inspected:** 26-Mar-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Li Hua Jie **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Weld Procedures Followed: Yes N/A **Electrode to specification:** No Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: OBG** Segments

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 13AW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG3013AD-003, Side Plate to FL3. The welder is identified as #069683 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-TC-U4b-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated SEG3013AD-009, Side Plate to FL3. The welder is identified as #067764 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-TC-U4b-FCM-1.

For the above mentioned welding activities ZPMC Quality Control (QC) Inspectors are identified as Li Yang and Wang Li Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS.

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Segment 12AW

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the top and bottom flange to Edge Plate of the Cantilever Bracket at panel point 112.5.

Segment 12BW

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the top and bottom flange to Edge Plate of the Cantilever Bracket at panel points 113.5 and 114.5.

Segment 12CW

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the top and bottom flange to Edge Plate of the Cantilever Bracket at panel points 115.5 and 116.5.

Bay 14

This QA Inspector observed Welder Qualification using the Shield Metal Arc Welding (SMAW) process for Groove Weld Qualification (Complete Joint Penetration) for plate of unlimited thickness in the 4G (overhead) positions.

Position, Process, WPS, Test Plate ID# and name are as follows:

4G **SMAW** WPS-B-P-2214-B-U2a-FCM-1

047567 Jiao Yang- VT reject by ZPMC QC 045143 Yu Hui Ye – VT reject by ZPMC QC 051547 Lu Zao Lin 048433 Ju Jian Guo 047866 Li Xian You 200569 Xu Fu Bao - VT reject by ZPMC QC 048941 Bi Chang Shan 047858 He Han De

ZPMC QC CWI Sun Tian Liang was present during welder qualifications

QA Verification

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ABF/ZPMC MT personnel. The following items were tested:

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Lift 12 East Bottom Plate WT connection clip

SEG3001H-272

SEG3001J-272

SEG3001D-272

SEG3001E-272

SEG3002E-272

SEG3003M-272

SEG3003N-272

SEG3002F-272

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.







Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

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Inspected By:	Hernandez,Dan	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer